

REMARKS

This Amendment is in response to the Office Action mailed May 25, 2005, which was made final. A Petition for Three-Month Extension of Time, and the requisite fee of \$510.00, is submitted herewith. A Request for Continued Examination, and the fee of \$395.00, is also submitted herewith. In the event any additional fees are necessary, kindly charge the cost thereof to our Deposit Account No. 13-2855.

Claims 20-22, 24-27, 40-42, and 45-46 were rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over GB 1,211,849, in view of Bonikowski et al., U.S. Patent No. 4,221,947 and MacCraven, U.S. Patent No. 4,437,904. According to the Office Action, MacCraven discloses using protective gas on the transport track for the purpose of adjusting the ambient or wire temperature as appropriate to maintain the desired temperature values within the desired annealing range, and therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide protective gas as taught by MacCraven in GB '849 in order to control desired annealing temperature.

GB '849 discloses an apparatus for drying continuous coatings or prints on aluminum foil. The heat treatment process disclosed in the GB '849 reference is not an annealing process. The temperature of the foil in the GB '849 apparatus is always below 180°C. See page 1, line 67. The lowest temperature for a low stress annealing process of aluminum is at least 200°C. Thus, it is respectfully submitted that the Office Action incorrectly describes the GB '849 reference as teaching the annealing of a billet at low stress. An aluminum foil will never be annealed in an apparatus as disclosed in GB '849 because the thin foil will become soft and will tear due to the transporting forces. A person of ordinary skill in the art, facing the problems of the Applicants, would not have looked to GB '849 for a solution.

Claim 20, as amended, recites that the material of at least one contact element is a metal alloy which is adapted to the material of the billet. Claim 40, as amended, recites that

the material of at least one contact element is one of aluminum and an aluminum alloy.

Claim 45 has been amended to recite that the material of the contact element is at least one of aluminum and an aluminum alloy. Claim 46 has been canceled. It is respectfully submitted that GB '849, in view of Bonikowski et al. and MacCraven, would not have rendered obvious the Applicants' amended claims 20, 40, 45, or any claims depending therefrom.

Claims 20, 40, and 45, as amended, recite a draw plate used as a first contact element. None of the cited references, alone or in combination, disclose or suggest to one of ordinary skill in the art what is now recited in amended claims 20, 40, and 45, and the claims depending therefrom. None of the amendments to these claims add any new matter.

When drawing a wire through a drawing die, a drawing force is needed. Typically, this force is applied by a draw plate, or drawing wheel. The draw plate is substantially positioned such that the wire leaves the terminal die in a direction perpendicular to the cross section of the die opening. Using a draw plate as a first contacting element of a first annealing path is neither disclosed in, nor suggested from, the cited references.

The claimed combination of an annealing apparatus and a drawing apparatus eliminates the need for a furnace for annealing, thereby reducing the number of process steps required. Additional spool transport or re-spooling of wired spools used in a furnace are also eliminated. Waste is also reduced. By using the draw plate as a first contacting element, the overall apparatus is also made more compact. In contrast to a conventional arrangement, the draw plate is arranged inside of the annealing chamber, thereby reducing the overall space requirements.

Claims 28, 30-39, 44, and 47-51 were rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over GB 1,211,849, in view of Bonikowski et al. '947, as applied to claim 20, and further in view of MacCraven '904. Inasmuch as claims 20, 40 and 45, as amended,

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are allowable over the cited references, and claims 28, 30-39, 44, and 47-51 all depend therefrom, these claims are also allowable for at least the reasons set forth above.

For the foregoing reasons, it is respectfully submitted that the application is in condition for allowance. The Examiner's reconsideration and favorable action are respectfully solicited.

Respectfully submitted,



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